**REMARKS/ARGUMENTS**

Claim Rejections 35 USC § 112

Claims 18 – 36 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 18, as amended to recite the different disclosed possibilities, is believed to be definite; the language is based on the allowed terminology of a Markush group in MPEP section 2173.05(i). Support for the disclosed possibilities is found in [0046] and [0049, L5] and Fig. 5. Further, in circuit design, it is common to choose among the different mappings (interconnecting possibilities) depending on the particular kinds of circuits being powered by the power domains and sub-domains; e.g. some circuits are sensitive to voltage fluctuations, some are not. Claims 19 – 36, being dependent on Claim 18, are believed definite as well.

Applicants do not adopt the Examiner's interpretation that "the mapping will be interpreted as a simple, predetermined coupling of all of the voltage sources".

Claim Rejections 35 USC § 102

Claim 1 was rejected under 35 U.S.C. 102(b) as being anticipated by Bardeen (US 2,524,035). Claims 1-5, 7, 9, 11 and 16-17 were rejected under 35 U.S.C. 102(b) as being anticipated by Brown (US 5,672,958).

Claims 1 – 17 are cancelled and the reasons for rejection no longer apply.

Claim Rejections - 35 USC § 103

Claims 6, 8, 10, 12-15 and 18-36 were rejected under 35 U.S.C. 103(a) as being unpatentable over Brown.

Claims 6, 8, 10, 12 – 15 are cancelled and the reasons for rejection no longer apply.

In view of new Claim 42 which recites a P-type MOSFET, Applicants respond to some individual rejections and traverse the assertion that "it would have been obvious to one skilled in the art that the Brown N-type MOSFET maybe replaced with a P-type MOSFET". It is not obvious, nor interchangeable to replace N-type and P-type MOSFETs. Instead, it is dependent on the technology, whether the two transistors both have individual isolation wells, whether the backgate of the transistor may be shorted to its source, whether the threshold voltage increases significantly if the backgate and the source are not tied together, etc. These considerations may be found in undergraduate textbooks like Allen and Holberg's "CMOS: Analog Circuit Design", Oxford Press 1987.

In view of new Claim 40, Applicants traverse Examiner's statements about using transistors "made from thick oxide to provide low-leakage characteristics". It is not obvious to use transistors with thick oxides. Again, it is technology dependent. For example, sometimes using MOSFET's with a larger value of gate length may be superior to using thick gate oxides where leakage is concerned. The value of the control voltage (e.g. if there is bootstrapping, other higher voltages etc.) and transistor threshold voltages are also contributing factors to the choice of the kind of transistor to use. Further reasons for traversing the statements are provided below in the section related to Claim 18.

In view of New Claim 41, Applicants also traverse the Examiner's assertions "it

would have been obvious to one skilled in the art to select a switching structure transistor with a 10-20% width of the voltage source transistors" and "workable ranges involves only routine skill in the art". The third MOSFET serves a different purpose and operate under different conditions than the first and second MOSFETs; therefore it is not obvious to assume that the third MOSFET's width would have been lower. Indeed, others skilled in the art may have alternatively adopted a larger width so that the ON resistance is lower and two power domains may couple more closely and "ride" together better. Further, it may very well depend on what the load circuits are exactly. Therefore, it is not obvious as to which approach provides more optimal results.

With respect to Claim 18, Brown does not anticipate nor suggest "a third switch to electrically connect pairs of the outputs of the M voltage sources" as recited in Claim 18 (currently amended). Instead, Brown shorts together all of his voltages sources at node 108, e.g. Figs. 1 – 4. Brown has a redundant power supply system (title, Col 1 L 10, Col 2 L 9, etc.) to avoid power failures in any individual path. Brown objective is to "regulate the voltage supply at the load as accurately as possible, the voltage drop across the series current devices should be as small as possible" (Col 1 L 46 – 48) and to "alleviate(s) the need for an excessive number of parallel-coupled current control devices such as expensive MOSFETs for reducing voltage drop in each of the output paths in a redundant power supply system" (Col 3 L 14 – 20). Therefore, Brown motivates and teaches away from the use of a "switch to electrically connect pairs of the outputs" together because if a switch is inserted between the voltage sources, then the voltage sources are not shorted together as desired in Brown to provide accurate redundancy. Moreover there tends to be at least some small voltage difference between the voltages sources due to the ON resistance of the MOSFET and to uneven loads, all effects of which are undesirable according to Brown. Therefore, Claim 18 should be allowable over Brown for at least these

reasons.

Claims 19 – 31 being dependent on Claim 18 (currently amended) should also be allowable for at least the same foregoing reasons. Claims 25 and 30 are cancelled.

Further for Claim 22, Applicants traverses the Examiner's assertion that Brown "discloses the mapping is stored in a memory (figure 1, item 114; column 4, lines 62-67)". Item 114, according to Col 4 L 62-67, contains a "control circuit" and a D/A converter. There is no statement about a "memory".

With respect to Claim 32, Brown does not anticipate nor suggest "switch circuitry to electrically connect pairs of the outputs of the M voltage sources" as recited in Claim 32 (currently amended). The foregoing arguments provided with respect to Claim 18 are applicable also to the amended Claim 32. Therefore Claim 32 should be patentable over Brown.

With respect to Claims 33 and 36, Brown does not disclose "a plurality of circuit blocks" as recited in Claim 33 because Brown has a redundant power supply and shorts all the output voltages together to supply the same, one circuit load. As Brown's invention motivates away and serves a different purpose, it is not obvious to apply his invention to Applicant's invention.

Further, Claims 33 – 36, being dependent on Claim 32 (currently amended), should be allowable for the at least same foregoing reasons.

New Claims

New Claim 37 recites elements not anticipated by either Bardeen or Brown. For example, Claim 37 recites "first", "second" and "third" switches not taught by Bardeen, and "third switch connected between two of the at least two power domains" not taught nor suggested by Brown. Since Claim 37 recites a third switch not taught by Brown, there is also no "third control signal line" "logically derived from the first and second" as recited by new Claim 38. New Claim 40 recites "thick oxide", and new Claim 41 recites "width ... 10 to 20 percent", neither of which are anticipated by Brown. Further, new Claims 38 – 44 should be allowable as they depend on Claim 37 which itself is believed allowable over the references.

Respectful request is made for reconsideration of the application, as amended, and for an issuance of a Notice of Allowance.

Respectfully submitted,

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